

ANNUAL REPORT
TO THE
RURAL DISTRICT COUNCIL,
OF
GLANFORD BRIGG,
FOR THE
Year ending December 31st, 1897,
BY
GODFREY GOODMAN,
MEDICAL OFFICER OF HEALTH.

BRIGG:

JOHN ASHTON, PRINTER AND STATIONER, WRAWBY STREET,
OFFICES: CARY LANE.

TO THE
CHAIRMAN AND MEMBERS
OF THE
RURAL SANITARY AUTHORITY
OF THE
GLANFORD BRIGG UNION.

GENTLEMEN,

I beg to present my report for the year ending December 31st, 1897.

The total number of Births registered in the whole District was 642, being 45 less than last year's total. Births.

They are divided as follows:—

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Brigg Sub-District	... 106	... 94	... 200
Barton do.	... 127	... 119	... 246
Winterton do.	... 98	... 98	... 196
	—	—	—
	331	311	642

The Birth Rate was 26.31 per 1,000 of population. This is lower than last year and much below the average of Rural Districts in this Country. Birth Rate.

The number of male children born exceeded that of females by 20, but as last year the number of females born exceeded the males by 21, the number of both sexes born during the two years is nearly equal.

The actual numbers being

	<i>Males.</i>		<i>Females.</i>
1896	... 333	...	354
1897	... 331	...	311
	664		665

Deaths. The total Deaths registered during the same period was 333, being 18 more than last year.

Divided as follows :—

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Brigg Sub-District	... 50	... 48	... 88
Barton do.	... 69	... 56	... 125
Winterton do.	... 50	... 60	... 110
	169	164	333

Death Rate. The Death Rate was 13.25 per 1,000, this is a little higher than last year, but is still much below the average.

Infant Mortality. The Infant Mortality for the year was 129 per 1,000. This is higher than last year, but still somewhat below the average for all Lincolnshire.

Causes of Infant Mortality. The causes of death in children under one year as returned to me are the following :—

Bronchitis and Pneumonia	...	15
Diarrhoea...	...	9
Dyspepsia	...	7

Marasmus (Wasting) ...	... 14
Convulsions ...	... 14
Premature Birth ...	... 12
Other Causes ...	... 12
<hr/>	
<i>Total</i> ...	83

In my last report I drew attention to the fact that a large number of these deaths were due to preventable causes. This subject is so important that I venture to repeat what I consider would be a means of preventing at least some, if not many, of these deaths. I recommended that the elder girls before leaving school should be taught the simple rules of health in the house. The importance of Disinfection and the care and feeding of Infants. Might not some of the money spent on Technical Education be used for this purpose. Is not the saving of lives more important than some of the subjects now taught. I am sure it only requires some influential person with a little spare time to take the matter up to carry out this suggestion. The result would in my opinion amply repay the trouble and expense incurred.

Dangerous Infectious Diseases.

The number of Notifications received during Notifications. the year was 207, being 24 less than last year's total. I give below a table showing the number of cases of each Disease, the Deaths, and the Mortality.

	<i>No.</i>	<i>Deaths.</i>	<i>Mortality.</i>
Scarlet Fever	... 150	... 4	... 2.6 per cent.
Diphtheria	... 31	... 4	... 13. ,,
Membranous Croup	... 5	... 3	... 60. ,,

		<i>No.</i>	<i>Deaths.</i>	<i>Mortality.</i>
Typhoid Fever	...	6	3	50. per cent.
Puerperal Fever	...	2	1	50. ,,
Erysipelas	...	13	0	0 ,,

Scarlet Fever. Scarlet Fever heads the list with 150 cases. The great majority of these occurred in two Districts, namely, Kirton, 59; and Barrow with Goxhill and New Holland, 42. The most of the cases in the Barrow District occurred in January and February, being a continuation of the 1896 epidemic, for the prevention of which the Schools were closed in December of that year.

Kirton
Epidemic.

The Scarlet Fever Epidemic at Kirton was of the mildest type. To this fact we must attribute our inability to control the outbreak. Mild outbreaks are always the most difficult to deal with. Often in these mild cases children will be kept at home for a few days and then sent to school without having been seen by a medical man.

The first intimation that these children have Scarlet Fever comes from some of the school teachers who have observed the children amusing themselves by picking flakes of desquamating skin from their hands. The information is then as a rule too late, the infection having been already carried to their class-mates.

The Infant School being the one most affected I recommended that it should be closed for one month from October 26th. This I notified to the Local Government Board and County Council on October 27th, and had notified the outbreak of Scarlet Fever on October 21st. During the epidemic I visited Kirton eight times, calling on all cases in the village that had been notified to

me. I also called at the schools and got the names of absent children. These I visited at their homes, some of them I found had Scarlet Fever, but the majority were absent through other causes I gave to the teachers the names of those suffering from Scarlet Fever, and also of those notified to me under the Notification Act. These children and all others from their houses were excluded from School by my orders.

On page 3 of the Memorandum prepared by the Medical Department of the Local Government Board with regard to exclusion of particular children from schools. It is stated that the School Attendance Officers, or Schoolmasters, should report to the Medical Officer of Health the absence of any child from school on the plea that it is suffering under one of the Notifiable Diseases.

The absence of several children of one family from School at one time. It also gives the Masters power under certain circumstances (when Scarlet Fever or Diphtheria is about) to exclude children suspected of having either of these diseases from school.

This notification and exclusion is undoubtedly of great value, especially in compact Districts, and where the Medical Officer of Health can give his whole time to Sanitary work.

In Districts such as mine, with an area of 136,835 acres, and having a population of nearly 25,000, it is quite impossible for the Medical Officer of Health to visit every suspected case early enough to prevent the spread of infection, even if his whole time were given up to Sanitary

work. I endeavour to visit all such cases. Sometimes I find the children so excluded suffering from an infectious disease and though excluded from school if the case is a mild one, they are allowed to play about with other children, and no medical advice is sought. When remonstrated with for not having called in a medical man, the parents who are, as a rule, poor with large families, usually reply, "We do not think the children ill enough to call in a doctor. If we call one in and he says it is not an infectious disease. Who is to pay him? Is it right that we should be put to expense because the teacher has made a mistake."

It appears to me that this difficulty could be got over by the Local Government Board allowing the School Board, or some other responsible body, to pay a small fee to the nearest Medical Practitioner to visit and report the condition of such cases to the Board in cases where the Medical Officer resides at a distance. The reduction in the number of Notifications would I am sure more than pay for this. Not to mention the saving of life and the advantage to the Education Department.

Typhoid
Fever.

The latter half of 1897 was remarkable for several severe outbreaks of Typhoid Fever in different parts of the Country. No doubt the atmospheric conditions were most suitable for development and distribution of the germs of this disease.

No. of Cases. In spite of this fact I am pleased to be able to state that only six cases occurred in the district during the year. All of these were notified since

June, no case having occurred during the first six months of the year.

Although the total number of cases was only half of last year's total, the number of deaths was three against last year's one. These six cases were sporadic. Two of them undoubtedly contracted the disease outside the District. A third is likely to have done so as I could find no local cause for it. In the remaining cases the suspected cause was removed.

As I find a great deal of misconception exists even among the educated classes with regard to Typhoid Fever, I may be excused for stating a few facts.

Remarks.

Typhoid Fever is essentially a communicable disease, though the mode by which it is usually communicated differs widely from that of some other communicable diseases. The infecting agent is the bowel excreta. The infection is not given by the breath or skin. The manner in which it is most frequently communicated is by drinking water which has been contaminated by the excreta of some previous case. It may also be carried by milk. In this case it is generally due to the fact that the vessels containing the milk have been washed in water containing Typhoid germs, or as has been proved, similar water has been added to dilute the milk. It may also, but less frequently, be carried by sewer gas, but only if the gas comes from a contaminated source and carries the necessary germs. All gases though they may be foul-smelling do not of necessity carry infection.

That every case of Typhoid owes its existence

to previous cases in the human body is going beyond existing evidence, the balance of which points in the other direction. The most reasonable theory is that the Typhoid germ is a vegetable parasite, having an independent existence and capable of propagating its kind. The period of incubation in Typhoid may in extreme cases vary from 5 to 30 days.

In the London Fever Hospital, during 9 years, 3,555 cases of Typhoid Fever were treated in the same wards as 5,144 patients not suffering from any infectious disease. The two classes of patients remained together both during the acute stage of their maladies and their convalescence, in most instances for several weeks. The same night chairs were used for both classes, and the employment of disinfectants was exceptional. Not one of the 5,144 patients contracted Typhoid Fever. It becomes clear, therefore, that if Typhoid is infectious at all its infectiousness is in ordinary circumstances an insignificant factor in its dissemination.

Diphtheria. Diphtheria has not been confined to any particular part of the district. Cases having occurred in Ashby, Barnetby, Horkstow, Ferriby, Melton, South Killingholme, Kirton, Ulceby, Scawby and Wrawby. 31 cases occurred with 4 deaths. In connection with several of these cases nuisances were found to exist, and were removed, particulars of which appear in Mr. Bainton's report, later on.

Membranous Croup. Five cases of Membranous Croup were reported to me, with three deaths.

Erysipelas. Thirteen cases of Erysipelas occurred in the

District, with no death.

Although we have had nothing that could be described as an outbreak of Whooping Cough in the District, two deaths have been returned to me as due to this complaint.

Whooping Cough.

The total number of deaths recorded from Consumption during the year was 30, 13 of these were Males, 17 Females.

Phthisis.

The average age of the Males was 33 years, that of the females $22\frac{1}{2}$ years.

Five of these cases occurred in the Barrow District. Last year out of a total of 20 deaths seven occurred in the same District.

Sixteen deaths from Cancer have occurred in the District. Eight of these were Males and eight Females. The average age of the Males was 60 years, that of the females (the same) 60 years.

Cancer.

Under the head of Accidents and Injuries ten deaths have occurred. Six Males and four Females. Of the Males three were returned as railway accidents, one crushed by a waggon, one drowned, and one from a fall. Of the Females three aged 75, 9 and 7 years were burned to death. This shows how Females, by reason of their clothes are much more liable to this accident than Males. It also shows that people at or about the above ages should not be left to take care of themselves when there is a fire in the room.

Accidents and Injuries.

During the spring Influenza was prevalent in almost every part of the District. It was chiefly

Influenza.

confined to children. The adults attacked, with few exceptions, suffered much less than the children.

The chief symptoms in children were vomiting, convulsions, delirium, pain in the head, retraction of head, photophobia, often abdominal pain, high temperature up to 106° in some cases, deafness and discharge from ear, even in mild cases. Bleeding at the nose in others. Some cases ended fatally, but the majority got rapidly well.

Anomalous Outbreak at Messingham.

On May 12th I received a letter from Dr. Bruce Low, Local Government Board, requesting me to visit Messingham and report on an anomalous outbreak, closely resembling Cerbro Spinal Fever.

Its resemblance to Influenza.

On May 17th I visited Messingham, and in company with Dr. Eminson inspected that part of the village which is situated between the main street and the brow of Stather Hill. To this part almost all the cases were confined. Dr. Eminson showed me several children, all of whom had suffered from a severe form of epidemic disease. The chief symptoms of which were vomiting, convulsions, delirium, pain in the head, photophobia, abdominal pain, high temperature up to 105° , deafness, discharge from ear, and bleeding at the nose. These severe symptoms occurred only in children. Death in one case occurred in a few hours. This is a typical description of the symptoms of that disease known as Cerebro Spinal Meningitis, and yet it will be seen at once on comparing its symptoms with those of this year's epidemic of Influenza just mentioned that they in every way resemble each other.

It is also important to note that in the Messingham outbreak while the children were suffering with the severe symptoms described, the adults in the same houses had ordinary Influenza of a mild type. That these severe symptoms should be chiefly confined to children was in keeping with the character of this year's epidemic of Influenza.

Each succeeding outbreak of Influenza differed in some respect from former ones. In the first year young adults suffered most severely. In another year old people were most affected. In a third, children. Again, in one year, the prominent feature would be severe head symptoms. In another lung complications, while in a third gastric symptoms would be most marked.

Difference in
succeeding
Outbreaks of
Influenza.

During the end of this year several cases of Influenza came under my care, which were ushered in with a high temperature, 104° to 105° , delirium, bleeding at the nose, and severe diarrhoea. Other cases occurred where the temperature gradually rose to the height just mentioned, with a morning fall and an evening rise. The appearance of the tongue, diarrhoea and other symptoms so closely resembling those of Typhoid Fever, that it was at certain stages of the disease difficult to distinguish between the two.

Influenza
simulating
Typhoid
Fever.

That a large majority of cases in the Messingham outbreak occurred in one particular part of the village is no doubt due to the fact that it selected the most unsanitary and worst drained portion of the village.

During recent years, I, like most medical men, have come in contact with a large amount of

Influenza. During that time I have so frequently met with all the symptoms described in connection with the Messingham outbreak (during ordinary outbreaks of Influenza, but never when Influenza was not prevalent), that I have come to look on these symptoms as the natural sequence in most severe cases of Influenza.

The conclusion therefore I am forced to arrive at is that Epidemic Cerebro Spinal Fever is only a severe form of Influenza. The severity of which is determined by the idiosyncracy of the individual, and the sanitary condition of the immediate neighbourhood.

Health of
the
District
during
the
Year.

The year 1897 may be regarded as a healthy one. With the exception of Kirton we have nowhere had a serious outbreak of epidemic disease, and even that outbreak was of the mildest type.

Influenza was prevalent at times, but the mortality from this disease was small. Measles was almost entirely absent from the District.

We had nine fewer cases of Diphtheria than last year. Half the number of Typhoid Fever cases that we had last year, and 150 cases of Scarlet Fever against 165 last year.

Inspector's
Report.

The following has been taken from Mr. Bainton's Journal, it shows in a concentrated form the work done during the year.

It also shows the work in hand and that about to be commenced.

SUMMARY OF INSPECTIONS AND WORK DONE,
1897.

	<i>No.</i>
Private Water Supply Improved ...	14
Public Sewerage Improved ...	13
Privies and Ashpits Improved ...	8
Schools Visited	12
Canal Boats Inspected	6
Overcrowding	1
Other Nuisances	20
General Inspections	25
Dairies and Cowsheds Inspected (4 Registered during the year) ...	10
New Buildings Inspected (Water certifi- cates granted)	32
Private Drainage Improved	36
Fever Cases Visited	12
Clerk's Orders Served	55
Entries in Journal...	357
Summons Ordered (not taken out, Work done)	4

PUBLIC SEWERAGE COMPLETED DURING THE
YEAR.

Goxhill	240 yds. of 9 in.
Kirton ... 420 yds. of 12 in. and 15 in.	
Hibaldstow 350 yds. of 9 in.	
Howsham 300 yds. of 9 in.	
Worlaby (Labor done by R. D. C. Sur- veyor) 100 yds. of 9 in.	
Barrow 100 yds. of 6 in. and 80 do. 9 in.	
New Holland 825 yds. of 12 in.	
Barnetby (re-laid) ... 200 yds. of 12 in.	
South Killingholme ... 240 yds. of 12 in.	
Burton 270 yds. of 9 in.	
Alkborough 50 yds. of 15 in.	

Ulceby ...	... 180 yds. of 9 in.
Burrringham ...	... 350 yds. of 9 in.

There have been laid 2120 yds. of 9 in. and 12 in.
 100 yds. of 6 in.
 50 yds. of 15 in.

2270

Burrringham ...	300 yds. of 9 in. in hand.
Howsham ...	300 yds. do.
Scawby Brook	500 yds. do.
Winteringham	320 yds. ordered to be done.

The tables of Rainfall, as on former occasions,
 have been kindly supplied to me by Mr. Alfred
 Atkinson, C.E.

I remain, Gentlemen,

Yours obediently,

GODFREY GOODMAN,

*Medical Officer of Health to the Rural
 District Council.*

TABLE OF ANNUAL RATE OF MORTALITY.

Year.	Estimated Population.	Deaths from all causes.	Annual rate of Mortality.
1874	26,593	500	18·8
1875	30,000	570	19·0
1876	30,132	528	17·5
1877	29,221	480	16·4
1878	29,000	450	15·5
1879	29,096	414	14·2
1880	29,199	525	18·0
1881	28,569	484	17·0
1882	28,817	477	16·5
1883	29,041	553	19·0
1884	29,503	559	18·9
1885	29,783	462	15·5
1886	30,173	523	17·3
1887	30,655	442	14·4
1888	30,967	462	14·9
1889	31,458	504	16·0
1890	32,083	484	16·4
1891	25,980	463	18·0
1892	26,140	409	15·6
1893	24,987	433	16·6
1894	25,331	336	13·25
1895	23,990	350	14·6
1896	24,205	315	13·0
1887	24,514	333	13·6

TABLE OF DEATHS FROM ZYMOtic DISEASES.

Year.		Small Pox.								Total Deaths from Zymotic Diseases.	Annual Rate of Mortality from Zymotic Diseases.
		Measles.		Scarlet Fever.		Croup.		Whooping Cough.			
				Diphtheria.				Fever, Typhoid, &c.			
1875	..	3	48	2	5	3	15	25	..	101	3· 4
1876	..	9	18	3	1	7	8	10	..	56	1· 8
1877	..	1	6	4	2	4	12	13	..	42	1· 46
1878	..	..	6	2	3	7	7	24	..	49	2· 0
1879	..	1	8	6	4	10	2	10	..	41	1· 4
1880	..	29	6	1	1	10	8	30	..	87	3· 0
1881	..	..	39	4	4	2	5	13	..	67	2· 3
1882	..	..	34	6	1	2	6	15	..	65	2· 25
1883	..	1	23	2	1	12	21	16	..	81	2· 8
1884	..	8	9	51	14	2	3	26	..	117	3· 93
1885	..	1	..	21	4	7	1	4	..	39	1· 34
1886	..	1	3	15	2	11	8	23	..	63	1· 42
1887	..	2	3	3	..	2	7	10	..	27	. 88
1888	..	2	6	..	1	..	5	8	..	23	. 74
1889	..	10	23	..	1	16	5	11	..	67	2· 1
1890	..	2	7	7	6	7	1	14	..	44	1· 34
*1891	..	1	..	3	3	1	2	7	..	17	. 65
1892	..	1	1	3	1	4	1	7	..	21	. 71
1893	2	17	5	..	..	8	6	24	..	63	2· 4
1894	..	..	6	1	4	8	..	2	..	23	. 9
1895	..	2	8	2	2	..	1	17	..	39	1· 6
1896	..	6	2	2	2	..	1	11	..	24	1· 0
1897	..	1	4	4	3	3	3	7	..	25	1. 0

*Notification Act adopted October, 1891.

(A).—PART 1.—TABLE OF DEATHS during the year ending December 31, 1859,
classified according to Diseases, Ages, and Localities

Names of Localities adopted for the purpose of these Statistics.	Mortality from subjoined causes.									
	Under 5. 5 upwds.	Smallpox.	Scarlatina.	Diphtheria.	Croup (not “spasmodic.”)	Typhus.	Enteric or Typhoid.	Fever.	Upwds.	5 upwds.
Appleby	5 upwds.	Under 5.	5 upwds.	Under 5.	5 upwds.	Under 5.	5 upwds.	Under 5.	5 upwds.
Ashby
Alkborough, Whitton and West Halton
Barnetby, Melton and Elsham	1	..	..	..
Barrow, Goxhill and New Holland..	1	..	..	..	..
Bonby, Saxby and Worlaby
Bottesford, Holme and Yaddlethorpe
Butterwick (East), Burringham and Gunhouse
Burton, Coleby, Flixborough, Thealby and Crosby
Croxton, Kirmington and Ulceby	1	..	..	..	..	..	..	..
Cadney and Housham
Ferriby (South) and Horkstow	1	..	1	..	..	..
Halton (East) and North and South Killingholme	1	..	1	..	..	..
Hibaldstow and Redbourn
Kirton	1	1	..	1	..	..	..	..
Messingham, Manton and Cleatham
Scawby-cum-Sturton and Twigmore
Wootton and Thornton
Winteringham
Wrawby	1	..	..	..
TOTAL	2	2	2	2	1	3

31st, 1897, in the Rural Sanitary District of the Glanford Brigg Union,

Causes, distinguishing Deaths of Children under Five Years of Age.

(A).—PART 2.—TABLE OF DEATHS during the year ending December 31st, 1897, in the Rural Sanitary District of the Glastonbury Union, classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics.	Mortality from all causes, at subjoined ages.					
	At all ages.	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65
Appleby
Ashby
Alkborough, Whittington and West Halton
Barnethy, Melton and Elsham
Barrow, Goxhill and New Holland
Bonby, Saxby and Worlaby
Bottesford, Holme and Yaddlethorpe
Butterwick (East), Burrougham and Gunhouse
Burton, Copley, Flixborough, Thealby and Crosby
Croxton, Kirmington and Ulceby
Cadney and Housham
Ferriby (South) and Horkstow
Halton (East) and North and South Killingholme
Hibaldstow and Redbourn
Kirton
Messingham, Manton and Cleatham
Scawby-cum-Sturton and Twigmore
Wootton and Thornton
Winteringham
Wraxby
TOTALS
	333	83	22	23	15	71
						119

Deaths occurring outside the division or district among persons belonging thereto
Deaths occurring within the district among persons no belonging thereto ..

} Not ascertained. Have no means of obtaining
accurate returns.

There is no Public Institution in the District. The Union Workhouse is in the Urban District of Brigg.

B.—TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year ending December 31st, 1897, in the Rural Sanitary District of the Glastonbury Union; classified according to Diseases, Ages and Localities.

NAMES OF LOCALITIES.	Census, 1891.	Estimated Population in 1893.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.									
			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Benteric or Typhoid.	Relapsing Fevers.	Puerperal.	Measles.	Hepatitis.
Appleby	584	584	..	..	..	..	..	..	..	..
Ashby	1634	2000	919	..	..	..	..	..	..	..
Alkborough, Whittington and West Halton
Barnetby, Melton and Elsham	1574	1730	..	..	..	..	..	..	..	3
Barrow, Goxhill and New Holland	3847	4100	..	..	..	..	..	..	..	2
Bonby, Saxby and Worlaby	1183	1183	..	..	..	..	..	..	..	1
Bottesford, Holme and Yaddlethorpe
Butterwick (East), Burringham and Gunhouse	385	385	..	..	..	..	..	..	..	..
Burton, Coleby, Flixby, Thealby, Crosby & Normanby	917	917	..	..	..	..	..	..	..	..
Croxton, Kirmington and Ulceby	1373	1373	..	..	..	..	..	..	..	..
Cadney and Housham	1464	1464	..	..	..	..	..	..	..	..
Ferraby (South) and Horkstow	428	430	..	..	..	..	..	..	..	..
Halton (East) and North and South Killingholme	881	881	..	..	..	..	..	..	..	..
Hibaldstowe and Redbourn	1255	1255	..	..	..	..	..	..	..	..
Kirton
Messingham, Manton and Cleatham	1139	1139	..	..	..	..	..	..	..	..
Scawby-cum-Sturton and Twigmore	1623	1600	..	..	..	..	..	..	..	..
Wootton and Thornton	1237	1230	..	..	..	..	..	..	..	..
Winteringham	1024	1024	..	..	..	..	..	..	..	..
Wraxby	995	995	..	..	..	..	..	..	..	..
			584	584	..	..	..	..	..	..	..	..
			709	714	..	..	..	..	..	..	..	..
TOTALS	23755	24145	..	..	..	..	..	..	..	13
					61	89	823	41	..	..	..	..

RAINFALL AT BRIGG,

1897.

Month.	Inches, Brigg.	Rainy Days.	Inches, F. Sluice.	Rainy Days.
January	2.06	18	1.71	16
February	2.34	15	2.44	13
March	2.99	15	3.30	15
April	1.39	16	1.53	11
May	1.99	10	1.64	8
June	1.98	11	1.95	8
July	0.14	3	0.20	4
August	3.10	15	3.02	16
September	3.42	11	3.12	11
October	1.28	10	1.45	9
November	3.08	13	2.58	11
December	1.71	15	1.83	9
Total	25.48	152	24.77	131

ALFRED ATKINSON, C.E.

BRIGG, JANUARY, 1898.

